16
537. l. 23.
5

PROPOSALS

For making a LARGE

Reflecting Teleſcope,

By FRANCIS HAUKSBEE.

1/2.

IT is now about Fifty Years ſince the Invention of the Reflecting Teleſcope was firſt communicated to the World by its great Author Sir ISAAC NEWTON; and though he at that Time himſelf conſtructed two of ſmall Lengths, by which he ſufficiently ſhew'd the Practice was anſwerable to all he expected from the Theory; I do not learn that any other Perſon has been ſo happy as to ſucceed in his Attempts this Way, till about five Years ſince, when that Curious and Learned Gentleman Mr. HADLEY, *F.R.S.* finiſhed two of theſe Inſtruments of five Foot and ¼ long, and that in ſo exquiſite a manner, that from many repeated Trials it appears they are in ſeveral Reſpects ſuperior, and in none much inferior to the *Royal Society's* Dioptrick Teleſcope of-

c. 2725.

of 126 Feet, made by the Famous HUGENIUS, and known to be no leſs conſiderable for its Goodneſs, than remarkable for its great Length.

I HAVE been encouraged by this Gentleman's Succeſs, to attempt the ſame thing, eſpecially having the Advantage of his kind Advice and Aſſiſtance; and I have accordingly made two Teleſcopes of three Feet and ½ long each, which have anſwer'd to my Wiſhes, and given a general Satisfaction to a conſiderable Number of curious Perſons that have ſeen with them; who expreſs'd their Deſire that I ſhould proceed, and attempt what may be done in greater Lengths, as being ſenſible how far a good Reflecting Teleſcope of ten or twelve Feet muſt excel the longeſt and beſt of the other Sort that have yet been made: And indeed the Trouble requiſite to manage thoſe in very great Lengths, as of one or two hundred Feet, added to the expenſive *Apparatus* neceſſary for that Purpoſe, with ſeveral other Inconveniencies, ſufficiently ſhew, that little more than what has already been done, can be expected from thoſe Inſtruments.

I HAVE the greateſt Reaſon to be confident of Succeſs in my future Trials, having, in my paſt Experiments, diſcover'd the Compoſition of a Metal exceeding proper for the Buſineſs, as taking a fine Poliſh, and reflecting as much Light as can be deſir'd; and being Maſter of a Method of grinding my Plates, and giving them the true Figure, to a great Degree of Exactneſs, and in a manner more certain than I have known practiſed for the Object Glaſſes of the Dioptrick Teleſcope.

THESE

THESE Conſiderations have determin'd me to proceed in this Undertaking, if the neceſſary Expence of it, which muſt otherwiſe be greater than is fit for me to bear, can but be made eaſy to me; in order to which, ſeveral Gentlemen having already promiſed to encourage me by a Subſcription, I have made the following Propoſal to invite any other ſuch curious Perſons, as are willing to promote a Deſign, whoſe Succeſs cannot but contribute to the Improvement of Knowledge, and Philoſophical Learning.

I THEREFORE propoſe to ſet immediately about two Reflecting Teleſcopes, the one of ſix Feet, and the other of twelve; which I promiſe to finiſh with the utmoſt Care, and as much Expedition as the Nature of the Buſineſs will admit.

AND ſuch Gentlemen as are willing to ſubſcribe for the promoting my Deſign, are deſir'd to pay One Guinea at the Time of Subſcription, for which I will give my Receipt; hereby engaging to ſhew every ſuch Subſcriber with my ſaid Teleſcopes (as ſoon as conveniently may be after finiſhing the ſame) whatever may at that Time be moſt remarkable in the Heavens; ſuch as the Moon with the various Appearances ſhe makes, as differently expoſed to the Sun, with the Inequalities on her Diſk, and their various Shadows; the two ſuperior Planets *Saturn* and *Jupiter*, with their Satellites; the double Ring encompaſſing the former, and the Belts upon the latter; the lunated Phaſis of *Venus*; and amongſt the fix'd Stars, ſuch as appearing but ſingle

with

with ordinary Glaſſes, are really double; their immenſe Numbers in the Milky Way, and ſome other Parts of the Firmament; the lucid Spot in the Sword of *Orion*, with ſome other of the ſame Sort, diſcover'd by Dr. HALLEY: And in general, whatever occurs that the Gentlemen ſhall think worth their Notice. And to the end that every Perſon may have Leiſure, without Interruption, to ſatisfy his Curioſity, it is propoſed that every Subſcriber ſhall be invited on four ſeveral Nights, and that on no ſuch Night above Six ſhall be preſent at the ſame time. And laſtly, that the Preference, in Point of Time, ſhall be given to ſuch Perſons, as ſhall have firſt ſubſcribed.

SUBSCRIPTIONS *are taken in by* FRANCIS HAUKSBEE, *in* Crane-Court *near St.* Dunſtan's *Church in* Fleetſtreet, London.